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# TWO CASES OF CONGENITAL DISLOCATION OF THE KNEE-JOINT.

BY W. L. RICHARDSON, M. D.,

*Visiting Physician of the Boston Lying-In Hospital,*

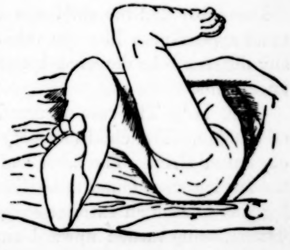
AND C. B. PORTER, M. D.,

*Visiting Surgeon of the Massachusetts General Hospital.*

THE following cases of congenital dislocation of the knee-joint are interesting as being instances of simple dislocation, uncomplicated with any monstrosity, paralysis, or alteration of the articular surfaces, such as is usually seen in this peculiar form of congenital dislocation.

CASE I.[1] E. D., aged twenty-four, single, primipara, native of Ireland, entered the Boston Lying-In Hospital, October 27th, in labor at full term. The presentation was with the occiput left and anterior, and the labor was in every respect a normal one. The child was a female, and weighed eight and a quarter pounds.

Soon after the birth a peculiar condition of the left leg was noticed. The child lying on her back, the left leg was observed to take a vertical position, the inner malleolus facing towards the umbilicus, and the foot being strongly rotated outwards. The femur was apparently well formed, as were also the tibia and fibula. The inner lateral and crucial ligaments were greatly stretched, and probably somewhat undeveloped. The tibia was dislocated forward and outward, its head resting well up on the space between the condyles. The fibula had evidently followed the line of the dislocation, but in a much less degree. The whole appearance was that of a well-marked dislocation of both bones forward, with an outward rotation. Above and below the knee-joint, were noticed two distinct furrows in the skin, which was itself con-



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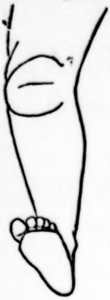
[1] Reported by Dr. Richardson.

siderably reddened in these furrows. There were no signs of any present or past inflammatory action about the joint.



That the dislocation had occurred in utero, and some time previous to the birth of the child, was evident from the marked furrow above and below the joint, the reddened condition of the skin in those furrows, and the peculiar manner in which the vernix caşeosa was found deposited about the joint. That the dislocation had been brought about by gradual pressure was shown by the fact that the lateral and crucial ligaments were not ruptured, but stretched, and that there was no history of any injury, nor traces of any inflammatory action.

By careful traction the dislocation could easily be reduced, but when the limb was left to itself the bones would immediately displace themselves. The child lay on its back or side, with the leg drawn up and the bones displaced. When the leg was restored to its normal position, the patella was observed to be less prominent than that of the right leg.

The bones were brought into proper position, and the leg bandaged. It was found that the use of a splint was unnecessary, as a simple bandage was sufficient to keep the bones in their proper place. The bandage was removed daily, and the limb carefully washed in alcohol and water, so as to prevent any chafing of the skin.

November 11th the bandage was removed, and the leg retained a perfectly normal position, although the knee-joint admitted of much greater lateral motion than that of the right leg. The mother and child were discharged from the hospital, well.

December 23d the child was carefully examined. The left leg was to all appearances like the other in length, size, and shape, nor could any difference be detected between the possible movements of the two knee-joints.

CASE II.[1] The case occurred in the practice of Dr. L. M. Barker, of Malden. The child (female) was first seen by me in consultation six days after birth. The labor had been normal. The tibia and fibula of the left leg were found to be dislocated forwards upon the femur. The leg was in such an extreme state of tension as to amount to reversed flexion, being turned upward and forward upon the thigh, so that the anterior surface of the leg and thigh touched each other, the sole of the foot looking directly toward the face of the child, the toes pointing backward and the heel forward. The quadriceps extensor cruris seemed to be in the same condition as is seen in those muscles which produce the more common club-foot deformity. The outline of the condyles of the femur could be distinctly recognized, as also the heads of the tibia and fibula, but the patella was with difficulty made out. There was no soreness or tenderness about the joint, and moving it caused no expression of pain from the child. In the angle of flexion there was still left enough of the cheesy matter with which new-born children are frequently covered, to show that the displacement had taken place a long time previous to birth, and the father corroborated this by a statement made in a letter in which he writes, "From the very first the handling and manipulation of the limb was unattended, evidently, with any distress to the babe. The sedimentary deposit in the indenture above the knee (formed by the unnatural position of the leg) was most conclusive evidence to my own mind that the displacement had occurred a considerable time previous to birth."

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[1] **This paper was read by C. B. Porter, M. D., before the Boston Society for Medical Observation, April 15, 1874.**

By gentle, firm, and constant traction the leg could be brought down into a straight line with the thigh without giving the child any pain. When left to itself, however, it would immediately and almost with a jerk return to its abnormal position. Any attempt made to flex the leg caused evident pain, on account of the strong contraction of the extensor muscles. There was no apparent shortening of the limb when compared with the other. A modified Desault's apparatus for fractured leg was applied, which, being removed a number of times, was worn for six weeks. A splint bent at an obtuse angle was then used for two weeks, and afterwards replaced by one bent at a right angle. After this had been worn for a few weeks the angle was frequently varied, the splint being changed every few days, so as to prevent any anchylosis. Occasionally the child was allowed to go without anything on the leg, so as to develop the muscles.

A careful examination now shows no apparent difference between the two legs, and the child can flex the leg naturally, and has lost the power to extend it abnormally, although at times the bones seem to glide a little upon each other, owing to the continued relaxation of the ligaments.

Congenital dislocations of the knee are exceedingly rare, and the literature of the subject of congenital dislocations in general is extremely limited. Druitt disposes of them in two lines: "Congenital dislocation is the result of original want of development or of intra-uterine disease, and is mostly incurable." Rokitansky about as curtly says, "Congenital luxation has been only recently recognized; it has been observed in several joints, chiefly the hip." Guérin regards it as probably a consequence of muscular retraction in the fœtus, just like the club foot, which is essentially a dislocation. Hamilton devotes a chapter to the subject, and two pages to dislocation of the knee. This, with his references, is the most complete article on the subject which I have found.

Cases are also mentioned by Kleeberg,[1] Cruveilhier,[2] Bard,[3] Wurtzer,[4] Youmans,[5] and in the *Bulletin de l'Académie.*[6] Hamilton gives a case of double dislocation of the tibiæ forwards, with double dislocation of both femora.

The two cases here reported, together with that reported by Dr. Bard, are very similar in character, and the results attained in all are interesting as serving to greatly modify Druitt's assertion that congenital dislocations are "mostly incurable."

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## HÆMATURIA.[7]

BY DAVID CHOATE, M. D., OF SALEM.

J. M., the patient, was a man about forty years of age, a driver of a coal team; he had a robust frame and healthy countenance. He complained in May, 1874, of blood in his urine, reporting that it was seen first in February, three months previous, at which time it was small in quantity and lasted but three or four days. He was then free from it for about a month. From the date of its reappearance, it persisted uninterruptedly. The amount lost from day to day could hardly be conjectured. The quantity of *urine and blood* together was not greater than would be considered normal for urine alone, but the whole was invariably of a deep blood color. When the urine was allowed to stand there was deposited a layer of blood-globules. The blood was always intimately mixed with the urine; it was never passed by itself, in liquid form or in coagula. The microscope discovered neither mucus nor pus nor casts; the whole field was filled with blood-globules. On one occasion the microscopist saw what he suspected to be a cancer-cell. Albumen was present, but only in quantity proportioned, as it seemed, to the amount of blood. An increased frequency of micturition was spoken of by the patient as occurring in the early stage of the complaint; it lasted about three weeks, but after he came under observation there was none during the entire sickness. He had no pain in the region of the bladder or loins, or in the course of the ureters, with a single exception; and this just as the disease reached its climax, in November, a point to which reference will be made later in the report.

Contrary to advice, the patient continued at his work, favoring himself as far as possible in respect to lifting, until July 3d, when he was induced by loss of strength and the hope that remedies might prove more efficacious, to cease from labor entirely. He continued still to go abroad into the air, avoiding all sudden and violent movements, till near the close of October. From this time he remained in-doors, and soon after was compelled, by the increasing debility and the vertigo and faintness consequent upon assuming the erect posture, to take to his bed. The anæmic state was now fully developed, as the skin and mucous membranes clearly witnessed.

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[1] Hamburger Zeitschrift, vi. 2.

[2] Atlas d'Anatomie pathologique, ii.

[3] Boston Medical and Surgical Journal, November 26, 1834.

[4] Müller's Archiv für Anatomie und Physiologie, 1825, iv. 365.

[5] Boston Medical and Surgical Journal, October 25, 1860.

[6] Vol. xi., page 301.

[7] Read before the Essex South District Medical Society, July 1, 1875.

The disorder may be said to have pursued its way, well-nigh unaffected by remedies, up to the fourth week in November. The hæmorrhage was so obviously passive in character that the medicinal treatment consisted almost exclusively of the administration of the various astringents. The only one of these that appeared at all to influence the flow, and which gave some promise of arresting it, was gallic acid, given at the suggestion of Dr. Mack (who saw the patient once), in doses of five grains every two hours. This was afterwards increased to seven grains every two hours day and evening, and continued thus through several successive days.

On the 21st of November hypodermic injections of ergotine were begun. Of a solution containing two grains in a fluid drachm of glycerine and water, six drops (equivalent to about one fifth grain) were administered twice daily; this was given on the 21st, 22d, 23d (one dose only this day), 24th, and 25th, the dose having been during this time increased by two drops, bringing it up to rather more than a quarter of a grain. On the 26th the stomach became irritable, and vomiting occurred; the medicine was therefore suspended. Vomiting persisted through the entire night of the 26th. On that day, however, the urine suddenly became clear, and so continued from that time onward. Some twenty-four hours later the patient had a sharp attack of pain in the course of the right ureter, followed by the passage of a small coagulum, apparently molded by the ureter.

From the condition of extreme anæmia into which he had sunk, he slowly recovered.

One or two points in connection with this case seem worthy of a few moments' additional consideration. First, Was the hæmaturia symptomatic or idiopathic? The question will perhaps be asked, Is there any such disease as idiopathic hæmaturia? Are not all cases symptomatic, the primary disease and true cause being in certain instances obscure? As a fruit of the extensive observation of Sir Thomas Watson, we have this utterance: "Hæmaturia, strictly idiopathic, must be very rare. Cullen says that neither he nor any of his friends ever met with an instance of it." He goes on to remark that the only example of hæmorrhage from the urinary organs, apparently idiopathic, that had fallen under his notice was one in which the occurrence seemed due to excessive indulgence in sexual intercourse, and which was immediately arrested by the introduction of a bougie, a case not at all to be compared with the one now under consideration. He believes that most of the alleged instances of idiopathic hæmaturia are probably due to calculi in the kidneys, which have existed there without causing pain; such being frequently met with, as he states, in the kidneys after death, in persons who had never suffered from pain or derangements of the urinary organs during life.

Roberts speaks of hæmaturia as "merely a symptom, and one which attends a great variety of pathological conditions;" but he makes no allusion to it as a strictly idiopathic disease. So, also, Dr. Todd states decisively, "Hæmaturia is only a symptom." Basham gives full reports of two cases of hæmaturia that had been patiently watched by him for considerable periods of time, and which he felt convinced were due to mental excitement or mental trouble; and he also alludes to a case reported by Roger, which that eminent man attributed to the same cause. Copland admits the possibility of such hæmorrhage, but believes the number of cases strictly of this kind to be very small, and that, even when proceeding from the capillaries of mucous surfaces and when perfectly independent of organic lesion of the vessels or of that surface, hæmorrhage is yet a consequence of antecedent changes. He mentions among causes and antecedent changes a modification of the blood itself, of the vessels by which their coats become relaxed and patulous, the state of the circulatory organs, and states of organic nervous power.

The rareness of this form of hæmorrhage seems thus to be strongly asserted, and we are called upon, in any case, to scrutinize carefully the evidence adduced. In the instance before us we may believe the source of the hæmorrhage satisfactorily determined, by the facts already detailed, as being the kidneys and not the bladder or other urinary organs. We should, perhaps, inquire first, May not some injury have been received to which it could be attributed? May there not have been congestion of the kidneys, or incipient Bright's disease, or malignant disease of the organ, or a calculus in the kidney? May not purpura hæmorrhagica, or the hypertrophy of the left ventricle of the heart, or obstructed circulation through the right side, reasonably account for the bleeding? In regard to bodily injury we may reply, The patient was unable to recall any such incident, or any occurrence of violent exercise, at or very near the time when the bleeding began. He did have a fall which he dated at a month previous, and by which he was bruised and lamed in the abdomen and loins, so as to be laid up four or five days; but he felt sure that there was no blood at that time. He recovered fully and returned to his work. As to inflammation or irritation by any poison or irritant medicine, we may say, there was an absence of the pyrexia, the scanty albuminous urine, with its epithelial casts and cells, the tenderness of the loins, and other ordinary symptoms belonging to such affections; and certainly no irritant medicines had been taken. Respecting the presence of Bright's disease, we are told in our text-books that if hæmaturia occur in this affection it is usually an insignificant symptom. In the case now under notice the absence of other symptoms, especially of progressive changes in the urine, seemed sufficient to negative the hypothesis of nephritis.

The probability that we had to do with cancer of the kidney seemed for a time quite strong. Basham remarks that hæmaturia is the first premonitory symptom of cancer, and is unaccompanied by any sympathetic irritation, except that while it continues there is troublesome frequency of micturition, but not before the bleeding, nor after, as with calculus. He considers frequently recurring hæmaturia the pathognomonic symptom of cancer, if the urine in the intervals of hæmorrhage (in the early stage) exhibits no indications of renal or vesical disorder. He remarks that the urine rarely shows the presence of cancer-cells. He puts the detection of a tumor in the lumbar region far on in the course of the disease, when the kidney has become the seat of extensive cancerous deposit.

Other writers, however, differ as to the order of these phenomena. Roberts puts first, as to its constancy, and generally also as to its date, the tumor in the abdomen, the hæmaturia being a secondary symptom. A tumor was easily ascertained to exist in fifty out of fifty-two cases of cancer of the kidney, while of forty-nine cases there was no hæmaturia in twenty-five at any time in the whole course of the disease. In twenty-four instances there was bleeding, but in four of these other possible causes for it were present. Roberts admits, however, that when present, hæmaturia is a sign of very great value. Niemeyer considers that hæmaturia and albuminuria are absent in cancer in about half the cases. Usually, he remarks, by the gradual advance of a marasmus, for which no other cause can be assigned, the suspicion is awakened of the existence of malignant disease. In the case we are discussing, no tumor could at any time be detected, and the hæmaturia was not recurrent, but constant.

The question of a renal calculus had also to be considered. In this affection one premonitory symptom is said to be never absent, namely, frequency of micturition, troubling the patient long before hæmaturia occurs. Other well-known symptoms follow: pain at the neck of the bladder and the extremity of the urethra, relieved by passing even a small quantity of water, pain in the loins, numbness in the course of the external crural nerve, retraction of the testicle, reflex disturbance of the stomach, uric acid and oxalates in the urine, and later, deposit of pus cells. All these symptoms of calculous disease may be said to have been wanting in the case now reported. When the hæmaturia ceased the urine was normal, although this result did not take place till the bleeding was arrested by ergotine, and then it ceased.

As to purpura hemorrhagica, during the seven months in which the patient was under observation no spots of extravasated blood were ever seen, and there was no hæmorrhage from other sources; and no evidence could be obtained that such symptoms had occurred previous to his coming under treatment. The same may be said of cardiac disease. So far, then, as respects the diseases of which hæmaturia might be a symptom, we seem constrained to accept the hypothesis of idiopathic hæmorrhage. Have we reason to suspect that there may have existed in this patient impaired organic nervous power, or deficient tone of the extreme vessels, or a morbid condition of the tissues surrounding the vessels, depriving them of their necessary support? Was there probably any deterioration of the blood itself? Or, finally, did the hæmaturia depend upon all these causes combined? Some facts not yet detailed lead us to entertain a belief in such degeneration of tissue and of blood. Although this man was able to make comfortable provision for himself and his family, having meat on his table daily, or nearly every day, with a variety and sufficiency of other food, he stated that his appetite had not been good for a long time previous to his sickness. He admitted that he had taken upon an average a pint of beer, and from one to two gills of whisky or rum daily for many months. He had no particular hours for drinking; sometimes he took the liquor while fasting, and sometimes after dinner. He had had morning sickness and vomiting for months, and so had taken scanty breakfasts. His appetite for supper was dainty. Under a regimen like this, protracted through a long time, changes were transpiring in the blood and tissues of the patient well calculated to prepare him for that which was to come. As Anstie remarks, "Absorbed into the blood in large proportions, alcohol increases largely the amount of fatty matters in that fluid, induces altered chemical relations between the blood and the tissues of organs, exerts a paralytic action upon the vaso-motor system, and so promotes congestion of organs."

While, then, nothing can be attributed in this case to the local action of the alcohol, as perhaps there might be in hæmatamesis, and while, too, the hæmaturia cannot be considered as properly symptomatic of any of the diseases enumerated, we may believe it to have been consequent upon changes antecedently induced in the system by excess of alcohol in the blood and lack of proper nutriment.

To consider for a moment the question of treatment, Was the ergotine, hypodermically employed, the cause of the arrest of the hæmorrhage? As to the proper dose for such use, Eulenberg directs one sixth of a grain; Wernich used one seventh; Napheys mentions five to fifteen drops of the fluid extract. A writer in the last number of Braithwaite used one minim of the fluid extract of ergot. The dose in the case now under notice was at first one fifth of a grain of Powers and Weightman's ergotine, dissolved in equal parts of glycerine and water; this was increased gradually to one fourth, or, more exactly, eighth thirtieths of a grain. We may consider the vomiting which appeared on the last day of this treatment, and which persisted for upwards of twelve hours, as due to the ergotine; and in this fact we find evidence that the patient's system was fully under the influence of the remedy. Kersch states that in all experiments on fasting animals, ergot produced violent retching, and in most of them vomiting. Dr. Squibb says the commercial preparations of ergotine differ much from each other, the dose of one being put at one sixteenth of a grain, while that of others is as high as two grains.

It is probable that a watery solution is best for hypodermic use. The alcohol and acetic acid contained in the fluid extract are irritating to the tissues, and should be eliminated as far as possible. "But all solutions," says Squibb, "which well represent ergot, are so loaded with organic matter that they are liable occasionally to cause abscesses." Professor Hildebrandt, in a recent paper on the use of this remedy in the treatment of uterine tumors, says that he uses a solution made with thirteen parts of water, three parts of extract of ergot, and two parts of glycerine; that it causes less pain than a solution in water and glycerine used in equal proportions, and that the glycerine is added to prevent the formation of fungi. He believes the occurrence of phlegmonous inflammation and abscesses is due to "not inserting the needle deep enough." He passes the canula at least two thirds its length, and does not mind injecting the fluid into the muscular tissues.

# SUBSEROUS FIBROUS TUMOR OF THE UTERUS.

BY GEORGE CAHILL, M. D. (HARV.), OF LYNN.

Mrs. H., aged thirty-two years, a native of New Hampshire, married, first discovered a swelling in the right side seven years ago. This swelling gradually increased, and in four years the whole abdomen was very large, there being scarcely any fluctuation. The patient now applied to several physicians, one of whom pronounced the disease ovarian, and tapped the tumor with the aspirator, but failed to find any fluid. There was intense pain after the tapping, and morphine had to be used freely. The patient was unwilling to consent to any further operative interference, and drifted about until April, 1875, when I was called to see her in the night. I found her sitting in bed with her feet in the position of a tailor, and quite œdematous. Her pulse was 95 and feeble, and her respiration was embarrassed in consequence of pressure from the immense abdominal tumor. The superficial veins of the neck were swollen. She was utterly unable to lie on the back, and found ease only in the position above represented. Her abdomen was as large as a barrel, and there was indistinct fluctuation. Indeed, her appearance much resembled that of a half-barrel with a woman sunk into it down to the sternum, and this supported by placing the hands out from each side. I administered a dose of morphine which produced but little effect, and the patient died the following day. This occurred about seven years after the first appearance of the abdominal swelling.

Post mortem, five hours after death. Body warm, with no lividity nor rigor mortis. Below the umbilicus there was a small fistula which appeared to communicate with the peritoneal cavity, and from which, during life, large quantities of fluid occasionally escaped. The abdominal cavity contained five gallons of ascitic fluid; this having been removed, an immense lobulated solid tumor presented, reaching from the pubes to the sternum. It consisted of three large lobes with fifteen smaller ones, apparently springing from the spinal column, but on close examination found to originate from the uterus, which was difficult of recognition because its substance and position were nearly all occupied by tumors. Section of all the lobes showed that the growth was fibrous and slightly cystic. The tumor weighed sixty-five pounds, or, with the five gallons of fluid, ninety-five pounds. The intestines and liver were healthy. The kidneys were of natural size, but soft and very friable. The heart was flabby and rather small, and there was a small patch of inflammation at the base of the right lung. There were extensive adhesions of the growth to the peritoneum. The left ovary was not discovered; the right was of the natural size, and apparently quite healthy. The bladder was small and appeared thickened.

It might be remarked that this woman suffered no pain whatever except when she was tapped with the aspirator, and, notwithstanding this immense burden of nearly one hundred pounds, came from New Hampshire to Lynn in the cars, two months before her death, and a few days before she died had crawled up and down stairs. A post mortem was permitted because the undertaker could not provide a casket large enough for the body before the tumor was removed.

# RECENT PROGRESS IN THERAPEUTICS.

BY ROBERT AMORY, M. D.

IT must certainly be admitted to-day by practitioners of medicine that real progress in therapeutics depends not so much on the introduction of new remedies, as on limiting the application of the known remedies by a precise knowledge of their action, in small and large doses, on the various organs and tissues of the body. We cannot deprecate too strongly the modern tendency to try new drugs whose physiological and therapeutical action has not been satisfactorily determined; the amount of injury to the general system may be masked by the apparent relief to prominent symptoms, even when the causes of those symptoms may be still at work, quietly but surely causing mortal injury. The great object of modern investigators seems to be the finding of some medicament which will either relieve pain or cause sleep, and the practitioner is led to forget that the right arm of the physician should hold and use less dangerous therapeutic agents, such as the regulation of diet, relief to the overworked mind or body, healthy exercise, and those other moral agents, which naturally occur to the man of common sense, whatever his professional pretensions. First in order of these new remedies which we feel called upon to note is the

*Monobromide of Camphor.* — Mr. Lawson had an opportunity of experimenting on the physiological properties of this compound, so recently introduced into practice and prominently brought to notice by certain accidents which occurred from its administration in the hands of incompetent practitioners.[1] The specimens of the drug were "thoroughly reliable and specially prepared samples of the new substance." His experiments on guinea-pigs, rabbits, and dogs succeeded in demonstrating to Mr. Lawson's own satisfaction that the drug possessed, as stated by Dr. Bourneville and others, marked hypnotic and calmative properties; yet the fact remains painfully evident that "many unavoidable impediments stand in the way of its employment in practical medicine." These impediments are found in the fact that it is insoluble in any unirritating medicine and that the administration of the drug itself will originate as well as exaggerate irritation and inflammation of the gastric mucous membrane. Its continued use under these circumstances induces inefficient nutrition of the tissues. In addition to these objections to its use, "the want of a convenient formula for its hypodermic injection is in itself almost sufficient to necessitate its exclusion" from the pharmacopœia. This drug, however, produces sleep which is sometimes interrupted apparently by hallucinations or delusions, and lowers the pulse, temperature, and respirations; while its continued use causes impairment of appetite and loss of flesh to a dangerous extent. The experimenter observed further that when large and fatal doses were given the temperature fell gradually and steadily until the death of the animal; but when smaller, though still fatal doses were given, the temperature fell to a certain point, then rose slightly, but eventually sunk until life had ceased. He remarked that the small vessels of the ears and eyelids contracted under the influence of the drug. On the other hand, when the decreasing temperature was restored by artificial means, the poisoned animal made a complete recovery from the effects of a dose which otherwise would have been certainly and rapidly fatal. Mr. Lawson very properly remarks that most observations of pulse-beats and movements of respiration in animals under experiments are liable to fallacy, on account of the mental excitement of these animals. But even making allowance for this fallacy he is quite confident that depression of the cardiac pulsations and respiratory movements is really due to the influence of the drug. His deductions induce him to assert that the therapeutical value of the drug is not sufficient to entitle it to a place by the side of the many calmative and soporific medicines which are analogous to it, and do not possess so many inherent bad qualities. Opium, chloral, cannabis indica, bromide of potassium, belladonna, hyoscyamus, conium, ergot of rye, valerian, assafœtida, and all diffusible stimulants possess the capability of performing, either directly or indirectly, one or other of the many medicinal functions ascribed to the new drug. The poisonous doses used in the experiments on rabbits by Mr. Lawson were from eight to twelve grains.

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[1] R. Lawson, M. B. (Edin.), The Practitioner, April, 1875.

*Jaborandi.*[1] — It must be confessed that therapeutics rely upon empiricism for the introduction of many new remedies; whether these tend towards progress must be determined in the physiological laboratory and by the bedside. Unfortunately, however, in the latter case we are often led astray either by too zealous observers or by incomplete reports of the effects of the drug, and are especially confused by the fact that no attention is given to the action of the drug in health. Of late years more attention has been given to the observation of symptoms induced by the administration of new remedies upon healthy men and animals. If we could reform the literature of older and better-known drugs, we should subject them to similar tests. An illustration of these remarks is afforded in the empirical use of jaborandi by the natives of Brazil, and its subsequent introduction into Paris by Dr. Coutinho.

According to Mr. Holmes, jaborandi is the leaf of a Brazilian plant belonging to the tribe of Xanthoxylæ and genus Pilocarpus (either *pennatifolius* or *selloanus*). The application of the leaves to the skin produces irritation, and when chewed they excite a glowing heat in the tongue, like pellitory. The active principle does not appear to be extracted by alcohol, for an infusion of the leaf has a mawkish, bitter taste, but does not excite the same glowing heat on the tongue that the leaves do, and has but little action, while the jaborandi from which an alcoholic infusion has been made retains its pungent taste and is physiologically active.

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[1] Journal de Thérapeutique, 1875, Nos. 6, 7, and 25; Le Progrès Médical, Nos. 238, 239, 242; Echo de la Presse Médicale, No. 47, 1874; The Practitioner, April, 1875.

In a healthy man the aqueous infusion seems to cause an increase in the quantity of the secretory fluids; and we may conjecture that this action is due to some effect upon the circulation in the capillary system, since M. Vulpian found that the conjoined administration of atropia has the effect of diminishing the secretion of sweat. It is well known to physiologists that a retardation in the blood-current and increase of tension in the vessels causes the watery part of the blood to be thrown out towards the emunctories.

As a further support of the conjecture concerning the effects of jaborandi upon the circulatory system, we have to remark that most observers of the action of this drug mention that the pulse-rate is increased, and the action of the heart is excited. This would naturally occur from an obstruction to the passage of blood through the capillary system; the increase in the temperature (one or two degrees) before perspiration occurs would also show an obstruction in the capillary system.

M. Vulpian discusses its modus operandi in the following way: in speaking of the comparative effects of jaborandi and atropia, the former of which excites perspiration while the latter retards it, he says that we are obliged to admit that jaborandi acts upon the secretion of sweat through a paralysis of the peripheral extremities of the nerve-fibres of the sympathetic system, which control the sudoriparous glands, whilst, on the other hand, atropia excites those fibres. He argues that any other explanation of these effects must presuppose that there is a selective action in the sweat glands and salivary glands, or in the nervous system which presides over their functions. By stimulating the sympathetic nerves the secretion is arrested; by section of those nerves the secretion is increased. The action of jaborandi and of atropia is of a similar character. The former acts by paralyzing the sympathetic fibres which innervate the sudoriparous glands, whereas the sulphate of atropia excites the fibres and checks the glandular secretion.

M. Vulpian calls attention to the fact that increased vascularity or congestion of the skin is not always accompanied by sweating. In typhoid and exanthematous fevers the skin is red, hot, and dry; and in men subjected to the action of atropia the skin is more congested than anæmic; and yet this medicine prevents, during a certain time, all sudation. The same modus operandi is exemplified even more truly in the salivary secretion, which the sympathetic fibres control during the time of their stimulation. A paralysis of these fibres is followed by an increased and continuous flow of saliva. Whether this paralysis causes an increased pressure of the blood circulation is not shown by any recorded experiment. We may easily conclude that an increased tension of the current within the blood-vessels would cause an outward flow of the watery part of the blood until this tension was equalized by that from outside of the vessels.

The use of jaborandi seems to increase not only the quantity of sweat and urine excreted, but also the amount of urea, chlorides, and phosphates eliminated. Some experiments are recorded wherein this fact is apparently contradicted; but the results of these experiments may be disregarded because no account was kept of the amount and character of nitrogenized food ingested, and also because the normal amount of urea, etc., was not estimated before the jaborandi was taken.

Professor Laycock[1] points out in a lecture that polydipsia occurs in both forms of diabetes, and in certain kinds of Bright's disease.

The proximate cause of dropsy being, he says, the amount of water in the blood, the disease has both functional and anatomical relations with the sudoriparous glands and the kidneys. In two cases jaborandi was ordered in the form of infusion of the strength of one drachm of the leaves and twigs in six ounces of water; of this a dessert-spoonful was taken every four hours, and afterwards the dose was increased to a table-spoonful every hour. The quantity of urine declined steadily from three hundred ounces to two hundred and thirty-six ounces, and afterwards to one hundred and eighty ounces. As the large doses seemed to cause a pain in the teeth, and some difficulty in opening the mouth, the jaborandi was administered in smaller doses. After the continuance of the treatment for fourteen weeks the amount of daily excretion of urine was reduced to one hundred and twenty ounces. Great care was taken after the first few days to keep the quantity of liquids ingested constant; during the latter part of the treatment this varied but twenty ounces. In another case, in which the jaborandi was used for seven consecutive weeks (one table-spoonful of the decoction twice daily), the amount of fluid taken in twenty-four hours was at first one hundred and eighty-six ounces, and the amount of urine excreted one hundred and fifty-eight ounces; the former was reduced to one hundred ounces, and the latter to ninety-eight ounces. In this case the specific gravity at first was 1008, and the amount of albumen was one eighth; the chlorides were abundant. Finally, the urine became acid; specific gravity was 1010; albumen one tenth, and no sugar was detected.

Dr. Sawyer,[2] Mr. Tweed, and Mr. Martindale report a peculiarity of vision noticed in healthy persons after a large dose of jaborandi. This peculiarity Dr. Sawyer describes as a dim vision for objects not immediately near; as, for instance, the person can recognize objects near the bed, but not those which are about twenty-five feet distant. "The pupils were not altered from their normal condition."

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[1] Lancet, August 14, 1875, page 242.

[2] British Medical Journal, February 6, 1875.

Mr. Langley[1] finds that when jaborandi is subcutaneously injected tetanic convulsions ensue, resembling those occurring after the exhibition of an overdose of strychnia. He has observed that the muscular action of the heart is weakened.

M. Albert Robin[2] has made an extended course of experiments on men and animals with this drug, and has recorded a number of cases in acute rheumatism, Bright's disease, and certain febrile affections, in which it was successfully tried for the relief of the pyrexia and reduction of œdema. His experiments would seem to prove a hypersecretion from the mucous surfaces generally, and especially from the lachrymal, salivary, gastric, and intestinal glands. This hypersecretion from the internal surfaces was followed in man by copious perspiration from the skin.

In a healthy man the temperature was increased from two to three degrees Fahrenheit (one to two degrees Centigrade) just before and at the commencement of perspiratory excretion, and afterwards fell to the normal standard, or even two or three degrees Fahrenheit below this point, and there remained for a day or two. After doses poisonous to animals the temperature continued to fall, and the frequency of the cardiac pulsations to diminish until death ensued. The quantity of urine did not exceed the normal amount. Messrs. Gubler and Robin state that the exhibition of this drug was followed by a reduction of the temperature and by abatement of pain. They do not recommend its use in cases complicated with valvular disease of the heart, as jaborandi seemed to them in man to increase the frequency of the cardiac pulsations.

Experiments with regard to the effect of this drug upon the animal temperature show a curious result: Elevation of temperature at the commencement of the action of the drug, progressive fall of temperature commencing at the moment of sudation, and depression below that of the initial temperature after the administration of jaborandi; if the initial temperature was normal the thermometer indicated lower temperature in the rectum, whilst at the same time it was higher in the armpit; at the commencement of sudation the rectal temperature was a little higher than that of the armpit; but when sweating had become general the temperature of the two parts became equalized, that of the armpit being lower and that of the rectum higher than before.

The temperature in febrile cases is more variable. According to M. Robin, the first effect of the drug is to determine an afflux of blood to the cutaneous surface, after which there occurs a slight elevation of temperature; yet the temperature is lowered in the rectum, whilst it is higher in the armpit, on the cutaneous surface; in other words, the temperature of the body is differently distributed, being as much above the normal standard at the surface as it is below it in the interior of the body. As these observations remained the same whether the infusion was hot or cold, it would seem to prove that jaborandi is a true sudorific.

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[1] British Medical Journal, February 10, 1875.

[2] Journal de Thérapeutique.

*Eucalyptus Globulus.*[1] — When this drug was introduced subcutaneously in dogs, the temperature of the body was not lowered, but when given by the mouth the temperature was lowered. If a decoction of eucalyptus was injected through the veins the manometer indicated a lower pressure (arterial), and the action of the heart was retarded. In these cases the animal was controlled by opium or woorara (curare), or by being bound down. Schläger attributes the retarding influence to a direct action on the musculo-motor apparatus of the heart.

(*To be concluded.*)

## GRIFFITHS ON THE ART OF PRESCRIBING.[2]

This little volume of one hundred and fifty pages, by N. Handsel Griffiths, contains a number of lessons, as he calls them, lectures as we should style them, on prescriptions and the art of prescribing.

The first or introductory lesson is better suited to the latitude of England than of this country. It is devoted to a brief exposition of the art of writing prescriptions in Latin. He advises not only that the scientific name of each article that enters into a prescription should be given in Latin, but that all the directions should be given in that tongue also. The following is a model of the way in which he would have prescriptions written: —

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|---|---|
| ℞ Ammoniæ carbonatis . . . . . . . . . . . . | grana sex. |
| Syrupi aurantii . . . . . . . . . . | drachmas duas. |
| Aquæ . . . . . . . . . . . . . | drachmas decem. |

Misce. Fiat haustus, cui, tempore capiendi, adde succi limonis recentis cochleare medium unum, et in effervescentiâ sumatur.

It is of course understood that the druggist will translate the directions from the Latin tongue into English, and write them upon the label of the bottle in which the medicine is dispensed. All this is absurd. Even if all our physicians can write grammatical Latin with ease, and our druggists and their assistants can translate Latin with accuracy, the whole procedure is pedantic and absurd at the present time. It is safer and better in every way for the patient, and those who take care of him, to be able to read the physician's directions, written out in good plain English by the physician himself. Any discrepancy between these directions and those put on the label by the druggist will be easily recognized, and so the danger of mistakes greatly lessened. We go even further than this. The scientific name of every article should of course be retained for the sake of precision, and this is generally Latin. The signs for scruple and drachm should not be used at all. This would leave only the sign for ounce, the abbreviation for grain, and that for minim, for the use of the prescriber, and would prevent the possibility of confounding the signs of scruple, drachm, and ounce. Instead of Latin numerals, Arabic figures should be used for the purpose of lessening still further the chance of mistake. Apart from the Latin portion of Mr. Griffiths' manual we can heartily commend it. More than half of the book is devoted to examples and exercises in prescribing. This is its most valuable portion. All medical students should read this part with care, and there are few physicians who would not derive benefit from examining it. The section on posology is altogether too brief for so important a matter. We are glad to notice, however, that our author recognizes its importance, as may be seen by the following quotation from the section referred to: "No greater service could be performed by the colleges or the great medical societies than the formation of a committee of competent men for the special investigation of this question of dosage; for it is a subject which is as yet only in its infancy, and the best knowledge which exists about it is undoubtedly confined to a very small section of the medical profession."

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[1] H. Schläger, of Göttingen, and Mees, of Leyden; Schmidt's Jahrbücher der Gessamten Medicin, January, 1875.

[2] *Lessons on Prescriptions and the Art of Prescribing.* By N. Handsel Griffiths, Ph. D., L. R. C. P. E., Licentiate of the Royal College of Surgeons, Edinburgh. 8vo, pp. 150. London: Macmillan & Co. 1875.

E. H. C.

## HOW CORONERS ARE APPOINTED.

We showed last week the danger that would arise against the credit of the profession by the cession to government of any part of the management of professional affairs, and we think it well to exemplify this by showing the disgraceful manner in which appointments are made to offices of great importance to the safety of the community.

When death occurs suddenly from unknown causes, or under suspicious circumstances, it is the duty of a coroner to examine the case, and, if satisfied that all is right, to report that an inquest is unnecessary, and to sign an official certificate; otherwise to call a jury to determine the cause of death, and open the way to legal investigations. The great importance of the office is evident when we consider how easily a death from poisoning, criminal abortion, or infanticide may be hushed up by the certificate of a corrupt or ignorant coroner. The place should be held by men of character and attainments, and though the law does not require them to be physicians, it is clear that at least they should not be pretended ones. In spite of this the list of coroners of Suffolk County contains, among the names of several excellent men, those of others who are a disgrace to the Commonwealth. We find several self-styled doctors who have, as far as we can learn, no degree, who are not recognized by respectable physicians, and who certainly are grossly ignorant. One has been tried, at least once, before the Superior Criminal Court, for abortion. The responsibility of filling the office rests with the governor and council, and we propose to show by the latest example with what care this duty is discharged.

Two weeks ago we read, to our surprise, that a Dr. A. W. K. Newton had been appointed a coroner. It is possible that he may have a claim to the title of doctor, though we should be glad to know what it is, as he certainly is not recognized by the profession, and does not appear to have the standing, education, or character that the position demands. We have been at some pains to learn the steps preceding this appointment, that the public may know whom to thank for it. A short time since Dr. (?) A. W. K. Newton went to the State House, where he was introduced to Governor Gaston by ex-Senator Jacobs. He presented to the governor a petition, of which we give some extracts, as follows: "To his Excellency, William Gaston the Govenor (*sic*) of the Commonwealth of Massachusetts and to his Honorable Counselors (*sic*). Respectfully represents Abiel W. K. Newton, M. D., of Boston, and petitions your Honors that he be appointed one of the Coroners for the said County of Suffolk."

The reason which the candidate assigned for his appointment was that "no coroner resides within about a mile from his said residence in any direction." This was the only reason he gave why he should be appointed, unless indeed another be that "he believes himself to be a competent and suitable person to perform the duties of a coroner."

In support of his petition he presented a paper which stated that the signers thereof had "long known" the petitioner, and that they were of the opinion that *a coroner was needed in that district*, and that they believed the petitioner to be a suitable man for the place. This paper was signed by fifty-three names, several of which cannot be found in the directory, and very few of which carry any weight out of petty politics. In justice to all parties we must say that the names of S. A. D. Shepard and S. Follansbee, whom we had always considered respectable apothecaries, were among the signatures.

The petition was brought up before the council, and, according to custom, was referred for investigation to the councillor for the district in which the petitioner resided. The councillor in question, Edward H. Dunn, who had never seen the petitioner, and who knew nothing whatever about him, reported favorably, and he was accordingly appointed.

The announcement of the appointment gave rise to much indignation in professional circles, and within forty-eight hours a protest was drawn up and signed by such prominent members of the profession (twenty-six in all) as could be conveniently reached at short notice, showing that the statement made by Newton and indorsed by the signers of his recommendation, namely, "that no coroner lived within about a mile of him in any direction," was absolutely false, one coroner, J. H. McCollom, M. D., living within a few houses of him, and three others (Cornell, Evans, and Underwood) living within the limits above mentioned.

What was the result of the protest? The councillor (Edward H. Dunn) had recommended a man without making any inquiry as to his character or the truth of his statements. Yet when a protest came in, showing clearly that the reasons given for the appointment were false, Mr. Dunn declined to withdraw his report of approval, without which Governor Gaston would not have made the appointment.

The affair is over, and there is nothing more to be said; but we shall do well to remember that to obtain an office of trust, honor, and of importance to the community, all that is needed is an ill-spelled petition, containing palpable falsehoods and signed by a few ward politicians and as many men of straw as may be convenient; and that the protest of men of standing but not of political influence, even when it contains proofs of the unfitness of the appointment, will be of no avail.

## THE ANNUAL MEETING OF THE AMERICAN PHARMACEUTICAL ASSOCIATION.

THE meeting appears to have been a perfect success. Little time has been lost in discussions of policy and personal matters, and the papers have for the most part been very good. We congratulate the association on the wise choice it made in electing Professor George F. H. Markoe president. We do not attempt anything like a report of the proceedings, as most points could hardly be of interest to our readers, but we may mention some subjects that strike us as important. The report of the permanent secretary, Professor John M. Maisch, of Philadelphia, was chiefly devoted to the meeting of next year. Efforts had been made, apparently without success, to bring the international congress of pharmaceutists to the centennial exhibition, but invitations had been sent to individuals of all nations, and the secretary recommended that steps be taken to communicate with all pharmaceutical bodies on the subject.

The report of the committee on adulterations, read by the chairman, Mr. Miller, was very interesting. Special attention was called to frauds in essential oils, which appear to be very common, but often difficult of detection.

The report of the committee on maximum doses was presented by the chairman, Dr. Wilson H. Pile, of Philadelphia. The committee reported that in view of the wide difference in the statements of different authorities in regard to the quantities of potent remedies which could safely be administered, they had come to the conclusion that an arbitrary list of maximum doses made from such conflicting authorities would be of no practical utility. They therefore suggested that a committee be appointed to confer with the National Medical Association on the subject of maximum doses, as well as the proper signs to be adopted to designate the correctness of larger doses when intended by the physician, as an understanding might thus be arrived at which would prove of practical value to the physician as well as to the pharmacist. The report was accepted and the recommendation adopted.

A paper in answer to the following query was read by Professor E. Scheffer: "Is pancreatin converted into peptone when it is digested with acidulated pepsin?" The writer was enabled by his experiments to assert positively that pancreatin when brought into the stomach became destroyed, and that it therefore could have neither physiological nor therapeutic effect when administered internally.

Professor Maisch made some very sensible remarks on the disgrace of the great traffic in patent medicines. We are glad to see the matter taken up by this body, for the pharmaceutists can do more, we think, to remedy the evil than the physicians. We must disagree with Professor Maisch, however, when he says that apothecaries can do nothing as long as quack medicines are called for. They always will be in demand till the millenium, but the demand will be lessened if they cannot be procured from respectable druggists. Professor Maisch stated that the question had been agitated as to the best means of informing the public of the dangerous nature of many of these nostrums. Dr. Frederick Hoffman, of New York, had suggested the publication of a health almanac similar to those issued by the proprietors of patent medicines, which should contain analyses of such preparations. Circulars had been prepared upon this subject, which Mr. Maisch desired to have distributed to the association.

We are glad to see that the metric system was not overlooked. As Professor Sharples well observed, no profession is more deeply interested in the subject than the pharmaceutical, which had to deal with two varying systems of measures, mixing by one and selling by the other. He stated that the process of converting one measure into the other was very difficult, and not generally understood. All the trouble arising from this source would be obviated by the adoption of the metric system.

A very interesting feature was the exhibition of chemicals, drugs, and other articles connected with the craft. It was a very fine display, and deserves far more space than we can allow it. Without making any comparisons or attempting to enumerate half of the objects worthy of notice, we must allude to the table occupied by the chemicals of Messrs. Power and Weightman, covered by the purest preparations in the most beautiful crystalline forms. We understand that the value of the articles exhibited by this firm was not under twenty-five thousand dollars. Messrs. Weeks and Potter attracted much attention. Lehn and Fink, a New York house of German chemists, showed many curious collections: for instance, a series of all the metals, and another of the alkaloids of opium. We must not forget the fine specimens of materia medica, some one hundred and fifty in number, presented through Professor Bedford to the Massachusetts College of Pharmacy by Lazell, Marsh, and Gardner, nor those given by Southall, Brothers, and Barclay, of Birmingham.

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## MEDICAL NOTES.

—According to our English exchanges there is room for improvement in the burial arrangements of West Lowe, in Cornwall. Over eight thousand bodies rest, if the term is allowable, in something more than half an acre of land, which has actually swollen up into a hill, leaving the church in a pit.

Putrefying bodies lie together through the soil like plums in a pudding, and when a new candidate for admission appears, exploring parties go out with an iron rod and take soundings till a free space of four and a half feet is discovered. A horrible slime is said to be constantly oozing from the graves in the higher part of the yard, which runs on to the floor of the belfry, and disinfectants have to be freely used for the safety of the ringers. Fresh primroses gathered and placed in the church for decoration purposes on Easter Sunday turned almost black by the following evening, owing to the presence of sulphuretted hydrogen in the atmosphere in such quantity as to be highly dangerous to human life. On Ash Wednesday the air of the church was so fetid that the congregation were unable to remain until the end of the service. The vicar and the government inspector desire a change, but the rate-payers, who apparently have the authority, think the present arrangement good enough.

— We regret to receive the news of the death, in his sixty-eighth year, of Dr. Milo Wilson, at Shelburne Falls, on September 3d. He was a highly respectable practitioner.

— Dr. Burg, a French physician, says the *Medical Record*, has recently published a little book in which he endeavors to controvert, by reference to his own observations and experience, the notion that the use of wind instruments is injurious to individuals characterized by pectoral weakness. All the men whose business it is to try the wind instruments made at the various factories before sending them off for sale are exceptionally free from pulmonary affections. Dr. Burg has known many who on entering this calling were very delicate, and who, nevertheless, though their duty obliged them to blow for hours together, enjoyed perfect health after a certain time. He himself is an instance of this. His mother died of consumption, and eight of her children fell victims to the same disease. Only three sons survive, and all these play wind instruments.

— Dr. C. Wackerhagen publishes, in the *New York Medical Journal* of September, a new method of making plaster of Paris splints. The displacement having been rectified, and the limb held in position by assistants, the latter is smoothly bandaged with cotton-wadding, prepared in the form of an ordinary roller; a flannel bandage spread with dry plaster of Paris, and rolled, is soaked in warm water (to which about two fluid ounces of saturated solution of sulphate of potassium may be added) and applied to the limb, over the wadding, by circular and reversed turns. One layer of the flannel applied in this way is thought amply sufficient for support.

The author continues as follows: "If it is desired to employ lateral splints, the dressing should be cut in the median line of the anterior and posterior surfaces. If antero-posterior support is preferred, it should be cut through the lateral surfaces. The splints should now be varnished on their inner and outer surfaces with shellac, or this preparation may be applied to the outer surface before removal.

"The shellac seems to permeate the dressing sufficiently to increase the strength of the splint, and at the same time renders it slightly flexible instead of brittle, as is the case when plaster of Paris is used alone."

— The *Lyon Médical* deals severely though not unjustly with the Paris Academy of Medicine in saying that the discussion on cholera does not merit the honor of being reproduced, and intimates that facts are required rather than speeches.

— In Europe, the average number of infants from each marriage varies from 4.73 to 3.07. Russia heads the list with the number 4.73 ; France occupies the last place with 3.07. The relative fecundity is as follows: Russia, Spain, Scotland, Ireland, Italy, Hungary, Norway, Sweden, Würtemberg, Prussia, Holland, Austria, Belgium, England, Saxony, Denmark, Bavaria, France. The reason of the small increase in the French population is not to be sought in the age at which marriages take place, nor in their number, nor in the mortality of infants or adults; it is due entirely to the limited fecundity — often voluntary — of the marriages.

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## SURGICAL CASES AND OPERATIONS AT THE BOSTON CITY HOSPITAL.

*Amputation at the Elbow-Joint; Torsion.* — E. S., aged fifty-five, was admitted to the hospital June 29, and gave this account of his injury: Three weeks before entrance, his left hand and wrist were caught in an engine and severely bruised and twisted. An abscess formed and discharged spontaneously, but did not heal. When the patient entered the hospital, there were sinuses and openings leading to carious bone in the hand and wrist. Free incisions were made with a view to giving free exit to the discharge, and saving the fore-arm. But the inflammation and suppuration increased until the middle of August, when the ulna was found diseased throughout its entire extent; the wrist was completely disorganized; the hand was swollen, purple, cold, stiff, and useless. The limb was getting worse every day. Amputation was proposed to the patient, and accepted as the only chance of recovery.

August 13th. The patient was etherized, and Esmarch's bandage and tourniquet were applied. Dr. Fifield then amputated the fore-arm at the elbow-joint. The operation was done by the antero-posterior method, oval skin flaps being secured. The incisions began and ended well below the condyles of the humerus. This was absolutely necessary, or the sharp processes of bone, especially the inner one, would protrude between the flaps. The brachial and two small vessels were twisted with the regular torsion forceps, used by Mr. Bryant. The hæmorrhage was mostly venous, and ceased readily when the elastic cord was removed. The arterial hæmorrhage was very slight, a fact repeatedly noticed in cases where Esmarch's method has been used. The flaps were closed with silk sutures, and a simple dressing made.

September 1st. The case has gone on well. There has not been any hæmorrhage. The flaps are well united, and the condyles are covered. None of the articulating surface of the humerus was removed at the time of the operation. The line of the cicatrix is upon the anterior surface of the arm. There is no necrosis. Only a slight superficial ulceration at the junction of the flaps in one or two spots remains. The man is nearly well.

Amputation at the knee and elbow is not as popular with American as with English surgeons. Bryant is a strong advocate of these operations, and says of that at the elbow-joint that it is an admirable one, and should be done much oftener than it is. Two considerations have probably deterred surgeons from performing this operation: fear of ulceration of the cartilages, and a long, club-shaped, unwieldy stump. The first has been proved over and over again to be groundless. In many, if not in most cases, the flaps unite as readily over cartilages as over the sawn extremity of bone. Whether the second objection is of sufficient importance to overbalance the increased danger of higher amputation is by no means proven. It is asserted by good surgical authorities that the redundant size of the end of the bone becomes in time reduced, and leaves a very comely and useful stump. It is admitted by every one that the less the part removed, the greater the chances for the patient's recovery. It is also admitted that the more the sheaths of the muscles and the medullary cavities of the bones are interfered with, the greater are the dangers of pyæmia, osteo-myelitis, necrosis, profuse suppuration, etc. These are certainly strong reasons in favor of joint-amputations.

The above is the second successful case of amputation of the arm in which Dr. Fifield has practiced torsion to control hæmorrhage. In neither case was there any subsequent bleeding. The operation was easily and quickly done. The end of the vessel was seized with the torsion-forceps, drawn out of its sheath, and twisted till the coats were divided sufficiently to give way and offer no further resistance. The end was twisted off in the smaller vessels, but was left attached in the larger ones. The artery should be twisted till that peculiar sensation of giving way is felt, or it may untwist. The secret of success seems to lie in drawing the artery well out of its sheath. No second forceps is needed to limit the extent of the torsion. There are many cases in which it would seem difficult if not impossible to practice it with success; for example, where the vessels are calcareous, or surrounded by or imbedded in diseased tissues. But there are, on the other hand, many cases where the ligatures undoubtedly prevent union by first intention, and any device whereby all foreign substances can be dispensed with safely will be one of the greatest improvements in modern surgery.

At Guy's Hospital torsion is the rule and ligature the exception. The femoral has been successfully twisted over fifty times without a single instance of secondary hæmorrhage. In fact, "the house-surgeons never expect to be called to cases of secondary hæmorrhage now torsion is the general practice of the hospital." "I have had stumps heal in a week," says Bryant, "and patients up in two weeks without one single drawback." Of course if a stump sloughs there is danger of hæmorrhage, no matter in what way the vessels may have been secured. Of one hundred and two amputations of thigh, leg, arm, and fore-arm, in only one was there secondary hæmorrhage, and that was from an arm where the whole stump sloughed. Such is the record of Guy's Hospital, and it is one well worth trying to imitate in private as well as in hospital practice.

Geo. W. Gay, M. D.

## A VACATION HOMILY.

Messrs. Editors, — "Americans know nothing of the art of taking rest," is the incisive remark of some magazine writer who is an acute and truthful observer of the habits of our people. He might have added that Americans are apparently ignorant of the necessity of rest, and of the way in which it is to be found. What is the summer rest of those of our people who recognize their physical needs? Some — the few, of course — court rest in entire change of scene and daily habit by steaming to Europe, the delightful do-nothing of the eight or ten days at sea relaxing overstrained nerves, and bestowing a benefit which is intensified, let us earnestly hope, by a thorough revolution in the stomach during the first twenty-four hours, the liver being meanwhile jerked and shaken into friendly sympathy and a future reinvigorated action. This feature of the sea-trip would hardly be voted delightful. No voyager would choose the unsentimental sensations and deprivations of "the first day out," but who ever failed to find an appetite for every one of the five meals of the steamer, and the nine o'clock P. M. Welsh rare-bit or sandwich besides, after having spent twenty-four or forty-eight hours in Neptune's mangle? In the exhilarating days which follow, should not this voracious being bless the rough handling of the sea-god? What bitters or tonic ever did so much for him? The sea-air, the lazy life, the freedom from care, and the hearty appetite, prepare our traveler for an active, enjoyable, healthful run from lake to mountain, from cathedral to village-hamlet, from picture-gallery to sea-view. He lives in an unaccustomed world, thinks unaccustomed thoughts, and, better, sleeps dreamless sleep long unknown. In October he returns to ten new days of steamer life, and reaches home with youth half renewed, and a fund of vigor which will endure beyond belief.

This is a wise manner of reviving sapped forces, but it requires a long purse. Fortunately there are other equally helpful means of recreation. Another small portion of our people is sensible enough, and plucky enough, to "sink the shop" out of sight, and become, as nearly as may be, children of nature, by following the better habits of the aborigines. There is probably no more healthful method of refreshing brain and body than that offered by camp life — life out-of-doors day and night; the meaty portion of the food of the camper-out being taken by himself from air, water, or woods; the day a succession of invigorating tramps, canoe-paddling, shooting, or fishing; the night a long, sweet, untroubled oblivion beneath the sky.

I believe the surest of prophylactics in incipient consumption, and the best of tonics in nervous affections and general debility, might be found in this simple advice: live an out-of-door life, and never sleep under a roof heavier than a tent-cloth. Such advice in our climate would of course, in certain months, require change of latitude, and perhaps a margin of pocket-money, but the law of effects would nevertheless hold good. The camper-out begins his rest by entering upon Indian habits. He returns to labor with the swarthy hands and face of the aborigine, with muscles as tough, appetite as sharp, and brain as clear as his. The store of vigor which one can pack away during a month or six weeks of camp life is amazing. More amazing are the "staying qualities" of this toughened, hard-packed endurance. To the astonishment of the heretofore dyspeptic, headachy, weak-marrowed, lifeless plodder, the old gaps in life are bridged over, the stomach behaves itself charmingly, the brain acknowledges all drafts at sight, and the nervous mechanism runs without a click or a jar, perhaps even into the new summer months which call for a return to canvas walls and the big bath in sunlight and oxygen. These campers-out are sensible creatures. With a small investment of cash they win immense dividends in a commodity too invaluable to be mentioned in the same breath with gold. But these speculators at nature's stock-board are unfortunately too few. The average professional or business man thinks he cannot leave his duties even for one month out of the twelve. This must be an absurd error. A well-managed business can surely be left during the dull months, and in the temporary absence of its head, to the care of subordinates, who may rest in their turn; and professional men can always relieve each other in the absence of either. This is done in other countries. It is only in America that men work until they wear out, or rather break down. It is haste to become rich that renders riches so useless, for one never has time to enjoy them, and the physical smash-up comes long before a well-conducted organization would dream of sinking under the effects of fatigue.

Another class of business and professional rest-seekers are those who go out of town for a two days' stay, then return to business for an equal length of time, and thus oscillating between labor and refreshment fail to enjoy either. During their absence they continually think of business, and so never free their minds from its claims, thus defeating all the restorative attempts of the nature they seek. This is another absurdity. In order to obtain rest the ordinary occupations of life must be absolutely dropped, and, if possible, forgotten.

Perhaps it is the many who in seeking rest take upon themselves all sorts of ridiculous hindrances, annoyances, and unhealthful conditions. These are they who crowd the fashionable resorts; who, leaving their comfortable homes behind them, with sweet cheerfulness stive themselves in seven-by-nine rooms; dress for breakfast, for dinner, for promenade, for evening; follow the fashionable routine; fear the sun, the wind, and the rain; eat questionable meals, bearing discomforts unnumbered for fashion's sake, and live in houses which are ill aired, poorly drained, typhoid breeders in many instances. For your fashionable landlord thinks more of economizing space, of filling stuffy apartments at disproportionate rates, than of pure air and well-built drains. There is neither economy nor refreshment, and but little pleasure, in such summer recreation. I know of a lady who passes her summers at a watering-place, and who refuses to receive her callers, actually depriving herself of what she confesses would give her great pleasure, because she finds it too much trouble to dress *twice* daily after her bath. The absurdity here lies in living under such rules as oblige one either to dress several times between rising and retiring, or to accept the dreadful alternative of being considered unfashionable. Fashion and restfulness are as incompatible as oil and fire.

But, undoubtedly, the great objection to fashionable summer resorts consists not in the mere failure to secure repose, or even healthful recreation, so much as in the effects of the neglect of hygiene in the arrangements of hotels and boarding-houses. Landlords care for nothing but gain, and their guests think of anything else than good water and suitable drainage. If typhoid be thus contracted, and the victims die, their friends thoughtlessly say (to quote a writer in *The Atlantic Monthly*), "In the wisdom of an inscrutable Providence it has been found necessary to remove them from our midst. In this way we blandly impose upon Divine Providence the responsibility of our short-comings. The victims of typhoid fever die, not by the act of God, but by the act of man. They are poisoned to death by infections that are due to man's ignorance or neglect." The subject of summer rest cannot be adequately treated within the limits of a brief letter. But thus much can be shortly said: we all need rest. It need not be said that I refer especially to those who have earnest vocations in life. There are those who never do anything. Such could by no possibility find rest in anything but work. To the actual worker a full month of positive forgetfulness of the eleven months of duty is a necessity. Business, whether professional or mercantile, should be put under mental lock and key, and the key lost for at least four weeks of the fifty-two. Power to work becomes intensified through rest. Hence to take rest becomes a duty, and to none more than to the physician. He cannot properly do his work when depressed by physical and mental fatigue. He holds immense responsibilities in his care. An error which might be the result, not of carelessness, but of weariness, of benumbed faculties, could work him incalculable harm, fetter his future usefulness, stunt his professional growth, besides, and worst of all, perhaps taking a life. If any worker needs a clear brain, a light heart, a vigorous body, it is the physician; and yet I suppose few men are so unready to rest as are medical men. This is a palpable wrong, both to their patients and to themselves. To thoughtful minds this mere word should be enough.

Let the physician, then, take his gun, his boat, his fishing rod, his novel, and hie himself away from work to rest. It is not necessary to live a tent-life, if he but take sensible rest otherwise. Let him avoid hotels and boarding-houses, and take his family (for let us hope he has one) to some clean, airy farm-house, where milk is plenty as water; where eggs, chickens, lambs, vegetables, and the summer fruit of the country are abundant and fresh. Whatever lameness may be evident in cookery may be easily set aright by a few hints from his wife.

As to dress, which is one of the immense bores of fashionable resorts, our rusticating physician will find great delight in the comfort of navy-blue flannel overshirts. Linen should be reserved for evening wear. During the day, whatever be the amusement, coats, vests, and linen should be discarded. Nine o'clock P. M. is a sensible retiring hour, and if the day have been properly spent, by this time one is ready for sleep. The physician, and this may apply to every class of reading men, may be followed, if he choose, by current professional literature and one daily newspaper; otherwise let him leave all books, except novels, behind. Recreation is much enhanced if the summer location be near a lake; for rowing, sailing, fishing, and swimming are not only great delights, but they also serve to purify the life-current, and harden the muscles. One month of such life is like a dip into the fountain of youth. One great improvement may be suggested: make the four weeks six. Rest of this nature should be governed by one general rule, namely, between morning and evening live out of doors. How spend the time? Walking, driving, fishing, hunting, berrying, picnicking, sailing, rowing, swimming. In such enjoyments the days go only too swiftly, and night brings sleep worth a king's ransom.

If our physician live in the country he may secure similar pleasures with equal simplicity and variety at some quiet sea-side village.

Such is the simple, economical, healthful rest which we may all find. It may be varied in a thousand ways, according to one's disposition and inclination. If any candid mind do not recognize the great desirableness and healthfulness of a summer passed in this manner, as compared with life at the stupid, mismanaged, too often unhealthful resorts where one is trammeled and pent up in all ways by the demands of dress and etiquette, and exposed to sickness by the cupidity and ignorance of landlords, such a mind must have been warped by the very life we should all flee when we seek rest. X.

LAKE COUNTRY, *August* 28, 1875.

## WEEKLY BULLETIN OF PREVALENT DISEASES.

THE following is a bulletin of the diseases prevalent in Massachusetts during the week ending September 11, 1875, compiled under the authority of the State Board of Health from the returns of physicians representing all sections of the State: —

The week has witnessed a marked increase in the prevalence of typhoid fever in all parts of the State. The sudden change in the weather produced an access of bronchitis. The presence of autumnal catarrh (hay fever) is reported by several towns in the middle and eastern sections. The order of relative prevalence of acute diseases in the State at large is as follows: Diarrhœa, cholera morbus, cholera infantum, typhoid fever, dysentery, rheumatism, bronchitis, influenza, diphtheria, scarlatina, whooping-cough, pneumonia, measles. The last disease has reappeared on the Cape (Plymouth, Mattapoisett). The summary for each section is as follows: —

Berkshire: Diarrhœa, cholera infantum, cholera morbus, dysentery, typhoid fever.

Valley: Diarrhœa, cholera morbus, cholera infantum, dysentery, typhoid fever. Shelburne reports a fatal case of cerebro-spinal meningitis. Springfield has some malarial and remittent fever.

Midland: Diarrhœa, cholera morbus, dysentery, cholera infantum, typhoid fever, rheumatism.

Northeastern: Diarrhœa, cholera morbus, dysentery, cholera infantum, typhoid fever (quite general). Cerebro-spinal meningitis in Lynn and Woburn.

Metropolitan: Diarrhœa, cholera morbus, typhoid fever, cholera infantum, dysentery, bronchitis.

Southeastern: Cholera morbus, diarrhœa, cholera infantum, dysentery, typhoid fever. Small-pox in Fall River.

It will be noticed that cholera infantum is on the decline in all parts of the State. F. W. DRAPER, M. D., Registrar.

## COMPARATIVE MORTALITY-RATES FOR THE WEEK ENDING SEPT. 4, 1875.

| | Estimated Population. | Total Mortality for the Week. | Annual Death-rate per 1000 during Week. |
|---|---|---|---|
| New York | 1,060,000 | 674 | 33 |
| Philadelphia | 800,000 | 367 | 24 |
| Brooklyn | 500,000 | 289 | 30 |
| Chicago | 400,000 | 214 | 28 |
| Boston | 342,000 | 212 | 32 |
| Cincinnati | 260,000 | 98 | 19 |
| Providence | 100,700 | 31 | 16 |
| Worcester | 50,000 | 29 | 30 |
| Lowell | 50,000 | 21 | 22 |
| Cambridge | 48,000 | 25 | 27 |
| Fall River | 45,000 | 29 | 33 |
| Lawrence | 35,000 | 9 | 13 |
| Lynn | 33,000 | 9 | 15 |
| Springfield | 31,000 | 4 | 6 |
| Salem | 26,000 | 14 | 28 |

BOOKS AND PAMPHLETS RECEIVED. — The Treatment of Nervous Diseases by Electricity. By Dr. Friedrich Fieber. Translated from the German by George M. Schweig, M. D. New York: G. P. Putnam's Sons. 1875.

Capillary Bronchitis in Adults. By Calvin Ellis, M. D. Published as one of the American Clinical Series. New York: G. P. Putnam's Sons. 1875.

The Relations of the Nervous System to Diseases of the Skin. By L. D. Bulkley, M. D. (From the Archives of Electrology and Neurology.)

The Diseases of the Heart and Aorta. By Thomas Hayden, Fellow of the King and Queen's College of Physicians, etc. In Two Parts. Philadelphia: Lindsay and Blakiston. 1875. (From A. Williams & Co.)

. Gout at the Heart. By Eldridge Spratt. Twelfth Edition. Glasgow: James Maclehose; Philadelphia: J. B. Lippincott & Co. 1875. (From A. Williams & Co.)

On the Administration and Value of Phosphorus. By E. A. Kirby, M. D. Philadelphia: Lindsay and Blakiston. 1875. (From A. Williams & Co.)

Shall we Lance the Gums in the First Dentition? (Read before the Maine Medical Association, June 9, 1875.) By A. C. Hamlin, M. D.

IN our notice of the excursion of the New Hampshire Medical Society to the White Mountains, on September 20th and 21st, we should have mentioned that as the meeting is but semi-professional it is hoped that physicians will not fail to be accompanied by the ladies of their families.